

REMARKS

In the final Office Action¹, the Examiner rejected claims 1-4, 6-30, and 53-55 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,122,361 to Gupta ("*Gupta*") in view of U.S. Patent No. 6,122,614 to Kahn et al. ("*Kahn*") and further in view of U.S. Patent No. 6,668,044 to Schwartz et al. ("*Schwartz*").

Applicants respectfully request that the Examiner reconsider and withdraw the rejection of claims 1-4, 6-30, and 53-55 because a *prima facie* case of obviousness has not been established with respect to these claims.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). M.P.E.P. § 2142, 8th Ed., Rev. 2 (May 2004), p. 2100-128.

A *prima facie* case of obviousness has not been established because, among other things, none of *Gupta*, *Kahn*, and *Schwartz*, taken alone or in combination, teach or suggest each and every element recited by Applicants' claims.

Claim 1 recites, for example, an automated directory assistance system comprising:

¹ The Office Action contains a number of statements reflecting characterizations of the related art and the claims. Regardless of whether any such statement is identified herein, Applicant declines to automatically subscribe to any statement or characterization in the Office Action.

a speech recognition module configured to receive an audible request for a telephone number from a caller and generate a transcript from the audible request;

a listing retrieval module configured to retrieve at least one listing corresponding to the audible request from a database, the listing retrieval module being configured to use the transcript as a query into the database; and

an accept/reject module configured to determine whether to accept one or more of the listings retrieved by the listing retrieval module and present a telephone number corresponding to the accepted one or more listings to the caller.

(emphasis added). None of *Gupta*, *Kahn*, and *Schwartz* teaches or suggests at least the claimed transcript, the claimed listing retrieval module, or the claimed query.

The Examiner alleges “the combination of *Gupta* ... in view of *Kahn* ... teaches using the transcript ... coming from the utterance (Fig. 3, subblock 400)” (Office Action page 3). However, the claimed transcript is generated “from [an] audible request,” the audible request being “for a telephone number,” while the utterance in *Gupta* is in response to “a prompt over the telephone network requesting the user to specify the locality in which the telephone number he seeks is located” (emphasis added)(*Gupta* col. 2, lines 38-41). Therefore, *Gupta* does not teach or suggest generating a transcript, and a transcript generated by *Khan* from the utterance in *Gupta* would, at best, teach a transcript of a user specifying a locality, not the claimed transcript generated from “an audible request for a telephone number.”

Kahn fails to cure the deficiencies of *Gupta*. The Examiner does not allege that *Kahn* teaches or suggests a transcript generated from “an audible request for a telephone number,” stating only, “the *Kahn* reference is only introduced to [teach] the generation of transcripts” (Office Action at p. 6). Indeed, *Kahn* is directed toward

“automating transcription services” (*Khan*, abstract) and does not teach or suggest an “audible request for a telephone number.” As discussed, *Gupta* only teaches “the user specify[ing] the locality,” not the claimed “request for a telephone number.” Therefore, the combination of *Kahn* and *Gupta* does not teach or suggest the claimed transcript generated from “an audible request for a telephone number.”

Schwartz fails to cure the deficiencies of *Gupta* and *Khan*. In *Schwartz*, “a system and method are disclosed for recording a telephone call upon demand” (*Schwartz*, abstract). Indeed, the Examiner relies on *Schwartz* for the proposition that “*Schwartz* teaches access[ing] an archive for a database query” (Office Action p. 3). Therefore, *Schwartz*, alone or in combination with *Kahn* and *Gupta*, does not teach the claimed transcript generated from “an audible request for a telephone number.”

For similar reasons as discussed above with respect to the claimed transcript, the cited references fail to teach or suggest the claimed “listing retrieval module configured to retrieve at least one listing corresponding to the audible request” (emphasis added). As discussed above, *Khan* is relied upon for teaching a transcript, and *Schwartz* is relied upon for the teaching of a query into a database, leaving only *Gupta* to teach the claimed “listing retrieval module configured to retrieve at least one listing corresponding to the audible request.”

In reference to the claimed listing retrieval module, the Examiner cites only Fig. 3, subblocks 404-406 of *Gupta* (Office Action at p. 2) to support the proposition that *Gupta* teaches the claimed subject matter (Office Action at p. 2). However, subblocks 404 and 406 appear in Fig. 3, which illustrates generating a “compound probability

value” to determine the likelihood that candidate localities “match ... with the spoken utterance” (*Gupta* col. 11, lines 53-67). Therefore, if subblocks 404 and 406 in *Gupta* are taken to disclose a “retrieval module” of any sort, it is for the retrieval of localities, not the claimed “at least one listing corresponding to the audible request.”

The references also fail to teach the claimed “transcript as a query into the database.” None of the references teach or suggest such a query, indeed, as discussed above, the Examiner relies on *Khan* only for teaching a transcript, and on *Schwartz* only for teaching a query into a database. The Examiner does not explain how the combination of *Gupta*, *Khan*, and *Schwartz* teaches or suggests using a transcript as a query. Indeed, given that *Khan* does not teach a database query, and *Schwartz* does not teach a transcript, there is no basis for asserting that their combination teaches the claimed transcript used as a query. *Schwartz*’s failings are particularly acute in light of the fact that the queries are not even based on voice data of any sort (col. 11-12), whereas the claimed transcript is generated from an audible request.

In addition, MPEP 2145 (X)(D)(2) states: “it is improper to combine references where the references teach away from their combination.” *Kahn* discloses “all speech recognition require[s] significant training to establish an acoustic model of a particular user” (*Kahn* col. 8, lines 56-58). This constitutes an unequivocal teaching away from a directory assistance system such as disclosed in *Gupta*, by suggesting that “significant training” would be required for each directory assistance caller. This would in turn require the collection of a staggering amount of data, and result in a serious

inconvenience for each directory assistance caller. The storage requirements and inconvenience imposed by this would render the combination unworkable and undesirable.

The M.P.E.P. makes clear that: “[t]he mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination” M.P.E.P. § 2143.01 (citations omitted). The Examiner has not shown that the cited art “suggests the desirability” of the alleged combination. Indeed, there is no reason why a skilled artisan would look to modify the speech recognition system disclosed by *Gupta* with the automated transcription service disclosed by *Kahn*.

First, as discussed above, *Kahn* is directed toward generating transcripts for tailoring speech recognition systems to individual users. Such teachings would suggest to one of ordinary skill in the art that the system disclosed in *Kahn* is of little use in a directory assistance system, which must be able to handle many different users without having a trained language model for each particular user.

The Examiner, however, alleges “it would have been obvious to one of ordinary skill ... to modify the teachings of *Gupta* with operator based transcriptions because it would advantageously allow for editing of unmatched speech.” This allegation does not consider the fact that in *Gupta*, the localities to be matched are single words, and stored as such (see col. 8). Because the localities are single words, and *Gupta* is designed to determine only the spoken locality, there is no reason to match speech data that is not part of the locality. In short, any unmatched speech in *Gupta* would be speech that

does not indicate the locality, and it would therefore not be advantageous to match this speech by using *Kahn's* transcripts. The conclusions in the Office Action were not reached based on facts gleaned from the cited references; instead, teachings of the present application were improperly used in hindsight to reconstruct the prior art.

Accordingly, *Gupta, Khan, and Schwartz* fail to establish a *prima facie* case of obviousness with respect to claim 1, at least because the references fail to teach each and every element of the claim, teach away from one another, and do not contain the necessary motivation to combine. Claims 2-4 and 6-16 depend from claim 1 and are thus also allowable for at least the same reasons as claim 1.

Independent claims 17, 29, 30, 53, 54, and 55, though of different scope from claim 1, recite limitations similar to those set forth above with respect to claim 1. Claims 23, 24, 29, and 36 are therefore allowable for at least the reasons presented above with regard to claim 1. Claims 18-28 are also allowable at least due to their dependence from claims 17.

Further, regarding claims 1, 17, 29, 30, 53, and 54, the Examiner appears to have taken "Official Notice." The Examiner indicates, "it is old and notoriously well known that in partial or fully automated directory assistance systems to 1) present a telephone number corresponding to a request for a listing and 2) to offer a connection for the caller to a called party listing." Applicants respectfully remind the Examiner of the provisions of M.P.E.P. § 2144.03 and the precedents provided in Dickinson v Zurko, 527 U.S. 150, 50 USPQ2d 1930 (1999) and In re Ahlert, 424 F.2d, 1088, 1091, 165 USPQ 418, 420 (CCPA 1970). An Official Notice rejection is improper unless the facts

asserted are well-known or common knowledge in the art, and capable of instant and unquestionable demonstration as being well known. It is never appropriate to rely solely on "common knowledge without evidentiary support in the record as the principal evidence upon which a rejection is based. Accordingly, Applicants traverse the Official Notice and request that the Examiner either cite a competent prior art reference in substantiation of these conclusions, or else withdraw the rejections.


In view of the foregoing amendments and remarks, Applicants respectfully request reconsideration and reexamination of this application and the timely allowance of the pending claims.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

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